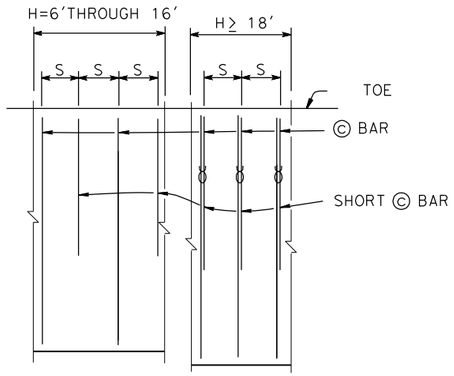
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

REGISTERED CIVIL ENGINEER _____ DATE X

PLANS APPROVAL DATE _____

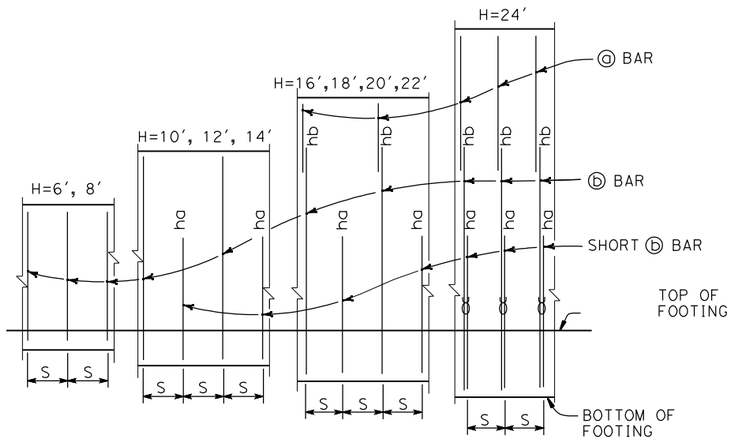
REGISTERED PROFESSIONAL ENGINEER — No. X — Exp. X — CIVIL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



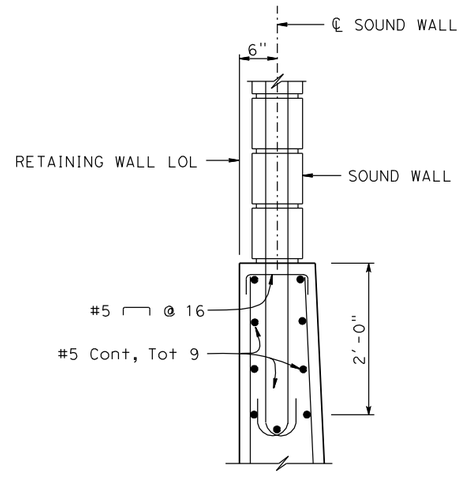
PLAN
No Scale

NOTES:
Only ℄ bars shown
"S" is ℄ bar spacing, see table
ϑ : indicates 2 bar bundle



ELEVATION
No Scale

NOTES:
"ha" and "hb" above ⓑ bars indicate distance from top of footing to upper end of ⓑ bars, see table.
"S" is ⓑ bar spacing, see table.
ϑ : indicates 2 bar bundle



DETAIL A
1" = 1'-0"

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications 4th edition with California Amendments

WS: 33 psf on sound wall

LS: Varied surcharge on level ground surface

EQE: Mononabe-Okabe Method

K_h = 0.3
K_v = 0.0

Soil: ϕ = 34°
γ = 120 pcf

Reinforced Concrete: f'c = 3600 psi
fy = 60,000 psi

Load Combinations and Limit States

Service I
Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS

Service II
Q=1.00DC+1.00EV+1.00EH+1.00WS

Strength I
Q=αDC+βEV+1.50EH+1.75LS
Q=1.25DC+1.35EV+0.90EH+1.75LS (for piles at heel)

Strength III
Q=αDC+βEV+1.50EH+1.40WS

Strength V
Q=αDC+βEV+1.50EH+1.35LS+0.40WS

Extreme I
Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where:

Q: Force Effects
α: 1.25 or 0.90, Which ever Controls Design
β: 1.35 or 1.00, which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
WS: Wind Load on Sound Wall and Barrier

STANDARD DRAWING
FILE NO. xs14-360-2
APPROVAL DATE July 2011

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. X
POST MILE X

X

RETAINING WALL TYPE 5SWP-DETAILS NO. 2

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: X
PROJECT NUMBER & PHASE: X
CONTRACT NO.: X

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES | SHEET X | OF X

FILE => $REQUEST

USERNAME => $USER DATE PLOTTED => $DATE TIME PLOTTED => $TIME